RE: WT Docket No. 04-140

First, I would like to commend the ARRL for their patient and well researched proposals and positions. There may be disagreements with their recommendations, but to question their motives or methods would be disingenuous.

In general, I am in agreement with the proposal to "refarm" the old Novice sub-bands into more productive use. While not set aside exclusively *by rule* for Novice use, they effectively provide exclusive Novice sub-bands larger than the ones set aside for Extra Class.

Despite my generally favorable opinion, I believe that some improvements could be made to the refarming plan. In particular, the current arrangement of sub-bands, with the extra privileges coming at the lowest frequencies, cuts up the bands unnecessarily. For all except Extra Class amateurs, instead of nine HF bands, there are actually thirteen (high and low segments in 80, 40, 20 and 15, plus 60, 30, 17, 12, and 10)). By moving the extra privileges to the band edges, the overall band plans would be simplified.

Using the 80 meter band as an example:

Voice communications would be permitted only above 3725 KHz for all classes.
Extra class would be authorized to operate from 3500 to 4000 KHz.
Advance class would be authorized to operate from 3525 to 3975 KHz
General class would be authorized to operate from 3525 to 3925 Khz
Novice/Tech classes would be authorized to operate from 3525 to 3725 KHz.

This plan gives exactly the same spectrum by class as the proposal from the ARRL, but makes the sub-bands for each class contiguous within a given band. It has the advantage of placing only the most technically skilled operators at the band edges, which should have the advantage of reducing harmful interference with non amateur frequencies. In addition, if usage trends continue and further adjustments are needed to balance narrow band (CW, RTTY) and wide band (phone) usage, it will be a relatively simple matter to move one boundary instead of having to redefine the sub-bands for each license class.

A couple more comments with regard to the proposal. Neither the ARRL nor the FCC mentioned power limits by class. While I agree that the Novice/Tech classes should have access to more bandwidth, I believe that they should continue to be limited in power to 200 watts. The content of the FCC element 3 exam is significant when power levels exceeding a kilowatt are used on HF bands where the interference readily crosses borders.

I also believe that "advancement of the art" would be facilitated if some small portion of each HF band could be set aside for QRP (low power) operation. As little as 10 KHz would be useful. I leave to others a recommendation of where within each band the QRP allocation should lie. Within this allocation, power should be held to 20dB below the rest of the band, or in other words, a limit of 15 watts PEP.

On a different subject, but related to the MF band plan proposal, it has been suggested that sub-allocation of the bands results in inefficient use of spectrum. In another technical field, it has long been understood that dynamic memory allocation by computer operating systems is more efficient if large pools of memory can be set aside to exclusively handle similar sized requests and releases of memory. The result over time is fewer "holes" in memory that are obviously too small to accommodate a large request, but much too large to efficiently satisfy a small request. The same fragmentation phenomenon shows up on computer hard drives. This has obvious parallels in dynamic allocation of radio frequency spectrum – a feature of amateur radio that is not common in other services. On that basis, I would argue that the current pattern of band sub-allocation in the HF bands is the appropriate model that should be applied to the MF band (160 m). I would encourage the FCC to reconsider the ARRL proposal, but to round the boundary up or down to the nearest 5 KHz.

I anxiously await the ARRL's proposal on sub-allocations based on signal bandwidth instead of emission type. It should refocus the debate on more relevant issues and away from the inflammatory issue of radiotelegraphy.

Thank you for consideration of these comments.

Frederick L. Stiles